

REMARKS

Claims 1, 5-9, 16-17 and 19 are pending. The support for the amendments to the claims are found in the original specification as follows: Claim 1: p.11, line 3, p.29, text line 9; Claim 5: claim 4, p.10, line 5; Claim 7: claim 11; Claims 8-9: grammar changes; Claims 16 and 17: deleting subject matter; and Claim 19: grammar changes. No new matter is added.

Claims 1, 2, 4, 5, and 7-20 are newly rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. (Office Action, page 2)

Claims 2, 4, 10 and 13 are canceled making the rejection of these claims moot.

Claims 1, 5, 7 and 9 are corrected to address the 35 U.S.C. 112 rejection.

Claims 1, 2, 4, 5, and 7-20 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Boralle et al (Oligostibenoids from Gnetum venosum, Phytochemistry, 34 (5): 1403-1407, 1993), in view of Berry (Cyclopropene fatty acids in Gnetum gnemon (L.) seeds and leaves, Journal of the Science of Food and Agriculture, (1980) Vol. 31, No. 7, pp. 657-662), and further in view of Iliya et al (Iliya et al, Stilbene derivatives from two species of Gnetaceae, Chem. Pharm. Bull. 50 (6) 796-801 (2002)), and Qi (Qi, Optimum for extraction processing of stilbene glucoside from Polygonum multiflorum, Zhongcaoyao (2002), 33(7), 609-611). (Office Action, pages 4 and 5)

As previously argued and will also be shown below, the invention now claimed which recites glucosidase, a soak temperature below about 70°C and the concentration of the claimed components, is not made obvious by the combination of the cited references.

The combination of Boralle, Iliya, Berry and Qi nowhere teaches the *aging step* which means hydrolysis of glucoside (Gnemonoside A to Gnetin C via Gnemonoside D) by glucosidase in *Gnetum gnemon* seed (see p.8 of the Amendment dated March 30, 2010). Berry does not show an improvement of taste of the vegetable extract by the *Gnetum* extract.

Qi teaches only at best, extraction with 50% ethanol by refluxing, which leads to an *inactivation of the glucosidase*. Qi also does not notice the presence of the glucosidase in *P. multiflora*.

The sentence from Qi mentioned in the Office Action on p.6, lines 12-13 (The level of stilbene glucoside in the extract was 2 - 3 times lower than that before extraction.) does not in fact exist in the full English translation, which corresponds to, “The level of stilbene glucoside in prepared *P. multiflorem* product is 2 - 3 times lower than that of fresh *P. multiflorem* product in Table 4 (P.9).” *The prepared product is not the extract.* Qi describes that the stilbene glucoside content in *P. multiflorum* from different sources varied as much as 2 - 3 times (p.9, line 6). Furthermore, Qi describes the content of stilbene glucoside in the *P. multiflorem* powder obtained from different sources and used for the extraction, but does not consider the level of stilbene glucoside in the extract which is not weighed in the preparation of the sample test solution (see p.7 of Qi). *The level is not equal to the content,* because the content of stilbene glucoside in extract cannot be calculated.

Qi’s Table2 shows that the content of glucoside in *P. multiflorem* powder (yield from 2 g of the powder; Experimental Proof, p.6) decreases with increasing concentration of EtOH. In contrast the applicant’s data in this invention (Table 1 in Oct. 5. 2009, Remarks) shows the increase of yield of diglucoside, Gnenonoside A with increasing concentration of EtOH owing to suppression of the glucosidase-hydrolysis.

Qi’s Table 2

Test No.	EtOH: concentration	dosage	reflux time	Content of glucoside
2	50%	8.0	60 min	11.97 mg/g
4	75%	6.0	60 min	11.38 mg/g
9	95%	8.0	60 min	10.23 mg/g
	Effectiveness	large	medium	small

Table 1 (extraction temperature: 50°C) in Oct. 5. 2009 Remarks

Run	EtOH: concentration	soak time	Yield of diglucoside (Gnenonoside A)
5	40%	5 h	0.59%
6	50%	4.5 h	0.73%
7	60%	4.5 h	0.96%
8	70%	4.5 h	1.14%
9	80%	4.5 h	1.28%

As mentioned above, an artisan of ordinary skill cannot expect from the combination of the prior art that *a glucosidase exists in the endosperms and hydrolyzes Gnenonoside A to Gnetin C through Gnenonoside D. Thus the applicants found out the existence of glucosidase (aging)* and established the absorption spectrum and Rf value in claim in order to confirm the existence of Gnetin C.

The new compounds (products), which have an unknown structure by a combination of known structure moieties, are synthesized (produced) by ordinary methods. For example, many antihypertensives (β -blocker, Ca-antagonist, ACE inhibitor, etc.) possess analogous substituents (functional groups).

This claimed invention, as well as the new compound, shows that the extraction by the aging step gives the extract with a different and novel composition.

In light of the above which shows that the combination cited art does not contain the disclosure necessary to derive or make obvious the invention now claimed, it is respectfully requested that the rejection be reconsidered and overcome.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1105.

Dated: September 21, 2010

Customer No. 21874

Respectfully submitted,

Electronic signature: /James E. Armstrong, IV/
James E. Armstrong, IV
Registration No.: 42,266
EDWARDS ANGELL PALMER & DODGE
LLP
P.O. Box 55874
Boston, Massachusetts 02205
(202) 478-7375
Attorneys/Agents For Applicant